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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,458	11/12/2003	Gary T. Neel	06882.0090-05	6741

22852-7590 08/21/2007  
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EXAMINER
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VATHYAM, SUREKHA .

ART UNIT	PAPER NUMBER
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1753

MAIL DATE	DELIVERY MODE
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08/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/706,458

Applicant(s)

NEEL ET AL.

Examiner

Surekha Vathyam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 53-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 53-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 53 – 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyodo (US 5,589,045) in view of Mori et al. (US 6,551,493) and Pace (US 4,225,410).

Regarding claim 53, Hyodo ('045) discloses a meter (1) comprising: a connector (3); a processor (50); a memory (61, 70), a plurality of machine instructions stored in said memory (see figs 1 – 5); a data acquisition system (see fig. 8) including at least one analog-to-digital converter (54). Hyodo ('045) discloses the data acquisition system capable of applying a voltage between electrodes such as working and counter electrodes (6, 7) (column 4, lines 47 – 52) or between fill-detect electrodes (9a, 9b) (column 7, lines 20 – 29), via reaction voltage setting circuit (63) and measuring any resulting current flowing between electrodes (column 4, lines 57 – 59).

Hyodo ('045) does not explicitly disclose the meter comprising two digital-to-analog converters and a multiplexer.

Mori ('493) teaches a meter (see fig. 1) comprising a first and second digital-to-analog converter (37, 41) that specify the first and second voltages for two sets of electrodes (see fig. 6 and column 12, lines 14 – 33).

It would have been obvious to one of ordinary skill in the art to modify the reaction voltage setting circuit (63) of Hyodo ('045) to include two digital-to-analog converters for the two sets of electrodes (6, 7 and 9a, 9b) as taught by Mori ('493) because as Mori ('493) explains, the digital-to-analog converters help convert the data output by the processor to analog signal for applying a predetermined potential to the electrodes (column 12, lines 13 – 19).

Pace ('410) teaches a meter (30) comprising a multiplexer (200) that selects an input to at least one analog-to-digital converter (202) (see fig. 10a, 10 and column 15, lines 50 – 55 and column 16, lines 10 – 17).

It would have been obvious to one of ordinary skill in the art to have modified the meter of Hyodo ('045) to include a multiplexer such that it selects an input to the at least one analog-to-digital converter (54) as taught by Pace ('410) because it is known to use multiplexers and analog-to-digital converters in conjunction with each other such that a single analog-to-digital converter can be used for multiple inputs thus keeping the scale of the circuit low.

Regarding claim 54, Hyodo ('045) discloses the meter wherein the data acquisition system includes a wake-up circuit (52) (column 4, lines 32 – 37).

Regarding claim 55, Hyodo ('045) discloses the meter capable of applying voltage between electrodes such as working and counter electrodes (6, 7), via reaction voltage setting circuit (63) and measuring any resulting current flowing between electrodes (column 4, lines 57 – 59).

Regarding claim 56, Hyodo ('045) discloses the meter capable of detecting a blood sample in a sample chamber (column 1, lines 11 – 16) by applying a voltage between electrodes such as fill-detect electrodes (9a, 9b), via reaction voltage setting circuit (63) and measuring any resulting current flowing between electrodes (column 4, lines 57 – 59).

Regarding claim 57, Hyodo ('045) discloses the meter capable of applying voltage between electrodes such as working and counter electrodes (6, 7), via reaction voltage setting circuit (63) and measuring any resulting current flowing between electrodes (column 4, lines 57 – 59).

Regarding claim 58, Hyodo ('045) discloses the data acquisition system capable of measuring voltage drop across said auto-on conductor (column 7, lines 6 – 15).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 54 – 57 have been considered but are moot in view of the new ground(s) of rejection necessitated by applicant's amendment.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Surekha Vathyam whose telephone number is 571-272-2682. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SV/  
13 August 2007

  
NAM NGUYEN  
SUPERVISORY PATENT EXAMINER  
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